CLAIMS:

- 1. A compound which binds to the same epitope or a portion thereof on human lymphocytes as the monoclonal antibody produced by the cell line deposited as ATCC HB 11423.
- 2. A compound as in Claim 1, wherein said compound is a monoclonal antibody or fragment thereof.
- 3. A compound as in Claim 1, wherein said compound is a monoclonal antibody identical to the monoclonal antibody produced by said deposited cell line.
- 4. The compound of Claim 1 wherein said compound is a monoclonal antibody having the same CDR as the antibody produced by said deposited cell line.
- 5. The compound of Claim 1 wherein said compound is a chimeric form of the monoclonal antibody produced by said deposited cell line.
- 6. The compound of claim 1 wherein said compound is a humanized form of the monoclonal antibody produced by said deposited cell line.
- 7. The compound of Claim 1 wherein said epitope is a CD2 epitope of CD2 positive human T cells.
- 8. The compound of Claim 1 wherein the epitope is a conformational epitope.
- 9. The compound of Claim 1 wherein said compound is a monoclonal antibody and said antibody is further characterized by binding to at least a portion of human CD2⁺ NK cells.
- 10. A process for inhibiting an immune response in a human patient, comprising:

treating a patient by administering an effective amount of the antibody of Claim 2

- 11. A process as in Claim 10 wherein said immune response is mediated by T cell activation and proliferation.
- 12. A process as in Claim 11, wherein said T cell activation and proliferation results from graft transplantation.

- 13. The process as in Claim 12, wherein said graft transplantation is allograft transplantation.
- 14. A process as in Claim 13, wherein said graft transplantation is xenograft transplantation.
- 15. A process as in Claim 11, wherein said T cell activation and proliferation results from an autoimmune disease.
- 16. A process as in Claim 11, wherein the antibody is contacted with blood of the patient <u>in vivo</u>.
- 17. A process as in Claim 16, wherein said antibody is contacted with the patient's blood in vivo by intravenous administration.
- 18. A process as in Claim 11, wherein said Antibody is contacted with the donor graft prior to transplantation.
- 19. A process as in Claim 10, wherein said immune response is mediated by natural killer cells.
- 20. A process as in Claim 19, wherein the antibody is contacted with blood of the patient in vivo.
- 21. A process as in claim 20, wherein said antibody is contacted with the patient's blood in vivo by intravenous administration.
- 22. A process as in Claim 19, wherein said antibody is contacted with the donor graft prior to transplantation.
- 23. A process as in claim 19, wherein said immune response results in graft versus host disease.
- 24. A process as in Claim 19, wherein said immune response results in graft rejection.
- 25. A process as in Claim 24, wherein said graft rejection is from allograft transplantation.
- 26. A process as in Claim 24, wherein said graft rejection is from xenograft transplantation.
- 27. A process for inhibiting the rejection of a graft in a human patient comprising:

treating a human patient to inhibit rejection of a graft with a compound, which binds to at least a portion of the same epitope on human lymphocytes as the monoclonal antibody

produced by the cell line deposited as ATCC HB 11423, in an amount effective to inhibit rejection.

- 28. A process as in Claim 27, wherein the compound is a LO-CD2a antibody.
- 29. A process/as/in Claim 27, wherein the graft is an organ.

nos 81 add